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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,442	10/25/2004	Takashi Shibanuma	040550	2402

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EXAMINER	
COONEY, JOHN M	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/511,442	SHIBANUMA ET AL.	
	Examiner	Art Unit	
	John m. Cooney	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5,6,8-13,15-17 and 19-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5,6,8-13,15-17 and 19-21* is/are rejected.

7)☐ Claim(s) *5,6,9 and 11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Applicant's arguments filed 12-21-05 have been fully considered but they are not persuasive.

Rejections over DE-198 22 944, Kruecke et al.('799) & ('275), JP-11-343326, and JP-2003-206330.

The following are set forth or maintained in light of applicants' amendments:

Claim Objections

Claims *5,6, and 9 are* objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitations of these claims broaden the scope of the claims beyond the boiling point limitations of the claims from which they depend.

Claims 5 and 11 are objected to because of the following informalities: Claims refer to HFC–365mfc but correlation between 1,1,1,3,3-pentafluorobutane and HFC-365mfc is not established in the independent claim from which it depends. Appropriate correction is required.

Applicants should insert "(HFC–365mfc)" after "1,1,1,3,3-pentafluorobutane" in claim 1.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims1, 3, 5, 6, 8-13,15-17 and 19-21are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants' originally filed disclosure lacks support for low-boiling halogen-containing compounds having the ranges of property values now claimed that are not also non-flammable. Though applicants' original disclosure may broadly contemplate "halogen-containing compounds". Such is not seen to be evidence of contemplation of the now claimed group of compounds claimed in a manner which reasonably conveys to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a new matter rejection.

The recitation in the claim that the blowing agent and the polyol mixture forms a premix which is substantially non-flammable does not provide recitation of non-flammability of the halogen containing compound, but rather exemplifies the new matter problems arising from applicants' amendments. Namely, applicants do not reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession and, demonstrated contemplation, of the now claimed grouping of substantially nonflammable premixes.

It is not seen that applicants' originally filed supporting disclosure provides contemplation of substantially nonflammable premixes based on flammable low-boiling halogen-containing compounds having the range of physical property values now claimed, and it is seen that, without recitation of non-flammability of these blowing agent species in the claims, the claims are now directed towards invention conceived after the time of original filing of the instant application.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 6, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' set forth species of low-boiling halogen-containing compounds having boiling points which fall outside of the scope of the claims from which they depend.(see objection above). Accordingly, the claims are confusing as to intent because it can not be determined what materials are intended to be encompassed by the metes and bounds of applicants' claims.

Claims1, 3, 5, 6, 8-13,15-17 and 19-21are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "low-boiling" in claims 1, 13, and 17 is a relative term which renders the claim indefinite. The term "low-boiling" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Page 16 of applicants' specification sets "low-boiling" halogen-containing compounds as a group of compounds within the set of halogen-containing compounds, but provides no means of ascertaining what is included or excluded by the term "low-boiling". Accordingly, claims are confusing as to intent.

Claims 13, 15, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the polyol" in line 5. There is insufficient antecedent basis for this limitation in the claim.

The recitation raise question as to elements required in the claim and, accordingly, the claims are confusing as to intent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,3,5,6,8-13,15-17 and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by WO 01/72880, US 2003/0055118, and Brandoli et al.(6,759,444), each taken individually, but referred to as the group BRANDOLI ET AL.

BRANDOLI ET AL. disclose blowing agents, polyol premixes, and the preparation of polyurethane foamed products prepared from agents, reactants, and additives as claimed (see the documents in their entirety with note also of the abstract, page 7 lines 7-20, page 9 lines 26-27, page 11 lines 1-5, and the examples of WO01/72880).

Claims 1,3,5,6,8-13,15-17 and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by EP 1,219,674.

EP 1,219,674 discloses blowing agents, polyol premixes, and the preparation of polyurethane foamed products prepared from agents, reactants, and additives as claimed (see the entire document with note also of page 3 lines 25, 35, and 36).

Applicants' arguments have been considered but rejections over BRANDOLI ET AL. & EP 1,219,674 are maintained for the reasons set forth above. References are maintained to disclose the products and processes as defined by the claims as indicated in the rejections above. The cited prior art discloses mixing the respective materials of applicants' claims, and the process operations as claimed do not require operations beyond formation of the premixes and foam products as described by BRANDOLI ET AL. & EP 1,219,674. Additionally, applicants' blowing agents do not exclude the presence of polyols in their composition.

Applicants' affidavit has been considered but is unpersuasive of patentability as the processes as claimed are not seen to distinguish over the mixing and reacting methods disclosed by BRANDOLI ET AL. & EP 1,219,674.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-46 of copending Application No. 10/493,215. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of Application No. 10/493,215 disclose blowing agents, premixes for preparing foamed products utilizing blends of HFC's in overlap with members of the instantly claimed HFC and other agents as claimed. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed any combination of all of the these blowing agent materials for the purpose of imparting their blowing effect in the preparations of the claims of Application No. 10/493,215 in order to arrive at the products instantly claimed with the expectation of success in the absence of a showing of new or unexpected results.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicants' comments with regard to the above provisional rejection are noted, and rejection is maintained. Applicants' position with regard to the above provisional rejection is acceptable.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOHN M. COONEY, JR.
PRIMARY EXAMINER
Group 1700